Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: GDR-115

Effective Date: May 1, 2017
Re-evaluation Date: May 2021

Product Name: Models 300-309 and 5800 Sectional Steel Garage Doors, Non-impact Resistant

Manufacturer: Overhead Door Corp
2501 South State Hwy 121 Bus. Suite 200
Lewisville, TX 75067
(800) 929-3667

General Description:
Models 300-309 and 5800 doors are sectional overhead garage doors insulated with a foamed-in-place polyurethane foam. The exterior steel skin is 27-gauge. The interior steel skin is 30-gauge. This evaluation report includes the following:

Model 300-309

- Sandwich-style, sectional doors.
- Steel interior and exterior skins.
- 1-5/8" thick door sections at the end stiles.
- 1/2"-deep emboss appearance with decorative trim.
- 2" track and rollers standard.
- Wood-grain finish on the inside and outside skins.
- Steel end stiles and hinges.

Model 5800

- Sandwich-style, sectional doors.
- Steel interior and exterior skins.
- 1-5/8" thick door sections at the end stiles.
- Embossed panels on the exterior skin.
- 2" track and rollers standard.
- Wood-grain finish on the inside and outside skins.
- Steel end stiles and hinges.

Hardware:

The following applies to all doors.

- Horizontal reinforcement must comply with the requirements on each drawing.
- End Hinges: Factory attached to the lower portion of each joint, consisting of 14/15-gauge galvanized steel hinges, low profile as shown on the drawing.
- Intermediate Hinges: 15-gauge galvanized steel hinges, low profile.
- Locks: Slide locks required if not attached to a drawbar (residential) door operator.
- End Caps: 20-gauge minimum galvanized steel.
- Tracks: Vertical tracks are 2" x minimum 16-gauge galvanized steel. Refer to drawings for specifics.
- Jamb Brackets: 15-gauge galvanized steel with formed side walls for stiffness. Refer to the drawings for bracket quantity and locations.
- Rollers: 2" diameter, 10-ball steel rollers. Mix of long stem and short stem rollers, per drawings. Locking “push nuts” added to some roller stems as shown on the drawings.

Glazing:

Windows are available on some door sizes if specified in the drawing notes (usually Note 7 or Note 8). Glass material and clear opening size of the window also vary by drawing. If “DSB” glass is specified, then tempered may also be used. See Table 1 for more information.

Product Identification: The door has a warranty and warning label applied during manufacturing that includes the manufacturers name and the Series and Model number for the garage door. The door will also have a second label, applied by the installer, which includes the manufacturers name and the design pressure rating for the door.

Limitations:

- **Impact protection:** These doors have not been tested for windborne debris resistance. Do not install doors that contain glazing in the Inland I zone without protection from an impact protective system. Provide an impact protective system for all doors installed in the Seaward zone.
- Drawing, allowable door height, glazing options and design pressure rating are shown in Table 1.
- The doors have a maximum height of 14'.

Table 1: Drawing, Allowable Door Height, Glazing Options and Design Pressure Rating

Drawing	Maximum Door Width (ft)	Design Pressures (psf)		Glass	
				Type	Clear Opening (in.)
411452-P00	9	+12.8	-14.8	No	n/a
411416-P00	9	+12.8	-14.8	1/8" Tempered	43-1/4 x 19-1/4
411417-P00	9	+22.9	-26.3	No	n/a
411418-P00	9	+22.9	-26.3	1/8" Tempered	43-1/4 x 19-1/4
411419-P00	9	+26.9	-30.8	No	n/a
411420-P00	9	+26.9	-30.8	1/8" Tempered	43-1/4 x 19-1/4
411421-P00	9	+31.2	-35.8	No	n/a
411422-P00	9	+31.2	-35.8	1/8" DSB	43-1/4 x 19-1/4
411423-P00	9	+35.7	-41.0	No	n/a
411424-P00	9	+45.3	-51.2	1/8" Tempered	43-1/4 x 19-1/4
411425-P00	10	+12.8	-14.8	1/8" Tempered	49-1/4 x 19-1/4
411426-P00	10	+12.8	-14.8	1/8" Tempered	49-1/4 x 19-1/4
411427-P00	10	+19.2	-22.0	No	n/a
411428-P00	10	+19.2	-22.0	1/8" Tempered	49-1/4 x 19-1/4
411429-P00	10	+22.9	-26.3	No	n/a
411430-P00	10	+22.9	-26.3	1/8" Tempered	49-1/4 x 19-1/4
411431-P00	10	+26.9	-30.8	No	n/a
411432-P00	10	+26.9	-30.8	1/8" Tempered	49-1/4 x 19-1/4
411433-P00	10	+31.2	-35.8	No	n/a
411453-P01	10	+41.0	-46.3	No	n/a
411434-P00	16	+12.4	-13.8	1/8" Tempered	37-1/4 x 19-1/4
411435-P00	16	+15.3	-17.0	No	n/a
411436-P00	16	+15.3	-17.0	1/8" Tempered	37-1/4 x 19-1/4

Table 1: Drawing, Allowable Door Height, Glazing Options and Design Pressure Rating

Drawing	Maximum Door Width (ft)	Design Pressures (psf)		Glass	
				Type	Clear Opening (in.)
411437-P00	16	+18.5	-20.7	No	n/a
411438-P00	16	+18.5	-20.7	1/8" Tempered	37-1/4 x 19-1/4
411439-P00	16	+22.0	-24.5	No	n/a
411440-P00	18	+18.5	-20.7	No	n/a
411441-P00	18	+15.3	-17.0	1/8" Tempered	43-1/4 x 19-1/4
411442-P00	18	+18.5	-20.7	1/8" Tempered	43-1/4 x 19-1/4
411445-P01	18	+22.0	-24.5	No	n/a
411446-P01	16	+23.0	-25.0	1/8" DSB	37-1/4 x 19-1/4
411447-P01	16	+27.0	-31.0	1/8" DSB	37-1/4 x 19-1/4
411448-P01	18	+26.3	-29.3	1/8" DSB	43-1/4 x 19-1/4
411449-P01	16	+30.0	-33.5	1/8" DSB	37-1/4 x 19-1/4
411450-P01	16.2	+39.2	-43.7	No	n/a
411451-P01	18.2	+30.0	-33.5	No	n/a

Installation Instructions:

Design Drawings: Install the doors as the design drawings specify. Provide the design drawings with the door. John E. Scates, PE signed and sealed each page of the design drawings on April 6, 2017. The following information, located within a box on each page, is provided on the design drawings:

- Models 300-309/5800
- Drawing Part Number
- Revision Number
- Maximum Width and Maximum Height
- Design Pressure Rating

General: The information within this evaluation report governs if there are any conflicts between the manufacturer's instructions and this evaluation report. Interior reinforcement hardware configurations will vary based on the garage door dimensions and wind pressure requirements. Refer to Table 1 for maximum allowable door width, allowable design pressures, and applicable drawings.

Attachment of Doors to Wall (Use One of the Following Methods):

- **Attachment of Door Components to Wood-Framed Walls Using a Wood Jamb:** Attach brackets for the vertical tracks and for the flag angles of the door directly to wood jambs with the fasteners specified on the design drawings. The wood jambs and the attachment of the to the wood-framed walls shall be as specified in the Overhead Door Jamb Connection Supplement, Drawing Number 411241, Rev. P6, signed and sealed on October 10, 2016, by John E. Scates, P.E.
- **Attachment of Door Components to Concrete/Masonry Block Walls Using a Wood Jamb:** Attach brackets for the vertical tracks and for the flag angles of the door directly to wood jambs with the fasteners specified on the design drawings. The Overhead Door Jamb Connection Supplement, Drawing Number 411241, Rev. P6, signed and sealed on October 10, 2016, by John E. Scates, P.E., specifies the wood jambs and the attachment of the to the wood-framed walls.
- **Attachment of Door Components Using Direct Mount Method:** Brackets for the vertical tracks and for the flag angles of the door may be attached directly to the door jamb framing in accordance with Overhead Door Jamb Connection Supplement, Drawing Number 411241, Rev. P6, signed and sealed on October 10, 2016, by John E. Scates, P.E.

Alternative Track Attachment Method: As an alternate, the door track may be directly secured to certain building substrates (wood, concrete, steel) using a commercial full angle-track per the Wayne Dalton Track Supplement Chart, Drawing Number 307494, Rev P11, signed and sealed on October 10, 2016 by John Scates, P.E.

Note: The manufacturer's installation instructions, the appropriate design drawing, the Jamb Connection Supplement, and the Track Supplement Chart (if applicable) must be available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.